

GE Healthcare

# DINAMAP ProCare

It's what's inside that counts

## Market-Leading Technologies

Designed specifically for health care professionals, the DINAMAP ProCare Series offers proven world-class technology in every parameter. With the DINAMAP ProCare Series, you can take BP measurements that are fast, accurate and comfortable. Get reliable temperature. And get oxygen saturation readings with your choice of two leading edge SpO<sub>2</sub> technologies. And now, depending on your needs of data storage, you can choose between a printer or printerless version of the ProCare.

## User-Friendly Design

It's lightweight, and its large red numbers ensure a clear bright display that is visible from around the room. Not only that, the DINAMAP ProCare is easy to mount, to carry even to wheel from place to place. Best of all, you'll find it simple to operate.

## DINAMAP® NIBP

With its unique patented algorithm and artifact rejection system, the DINAMAP ProCare ensures exceptionally accurate BP regardless of patient movement. This DINAMAP algorithm works for every typology from hypo- to hypertensive and every category of patients from neonates to adults.

## IVAC® Turbo•Temp™

IVAC® Turbo•Temp™ is not only extremely accurate, but also very fast. In fact, oral (or rectal) predictive temperatures are provided in approximately 7 seconds, saving health care professionals valuable time. This temperature can also be used in monitoring mode.

## SpO<sub>2</sub> Your Choice for Accuracy even with motions and low perfusion

With Masimo SET®, you get a new sensitivity mode that calculates values under low perfusion conditions. With Nellcor OxiMax™, you have a new feature called SatSeconds™ that cuts down on nuisance alarms.



## Connectivity

ProCare has now the ability to transfer its data via its RS232. Connect the monitor to your laptop to collect data for research studies or to electronically chart. ProCare can also been connected either to an Obstetrical Corometrics monitor or to an ApexPro GE telemetry.

## Built to Last

As with all DINAMAP monitors, the ProCare has been engineered to provide years of trouble-free service. In addition the monitors are designed to be low maintenance and easy to repair. To prove it, GE commits to a full 2-year parts and labour warranty.

## Specifications

### Safety standards

CE marking 0086: this product conforms with the essential requirements of the Medical Device Directive.  
Accessories without CE mark are not warranted to meet the essential requirements of the Medical Device Directive.  
DINAMAP® ProCare monitor classified with respect to electric shock, fire and mechanical and other specified hazard only in accordance with CAN/CSA C22.2 NO.601.1. also evaluated to IEC-601-2-30.

### Environmental

Operating Temperature: + 5 °C to + 40 °C (+ 41 °F to + 104 °F)  
Operating Atmospheric Pressure: 700 hPa to 1060 hPa  
Storage Temperature: – 20 °C to + 50 °C (– 4 °F to + 122 °F)  
Storage/Transportation Atmospheric Pressure: 500 hPa to 1060 hPa  
Humidity Range: 5% to 95% noncondensing  
Radiofrequency: Complies with IEC Publication 601-1-2 (April 1993) Medical Electrical Equipment, Electromagnetic Compatibility Requirements and Tests and CISPR 11 (Group 1, Class B) for radiated and conducted emissions.  
Ingress of water: The DINAMAP® ProCare Monitor is protected falling drops of water and conforms with the IEC 529 standard at level of IPX1.  
Software is developed in accordance with IEC 601-1-4.

### Mechanical

Classification information: Mode of operation: continuous  
Dimensions Height: 9.7 in (24.7 cm)  
Width: 8.6 in (21.9 cm) without Temperature; 10.0 in (25.4 cm) with Temp  
Depth: 5.3 in (13.5 cm)  
Weight, including Battery: 5.68 lb (2.58 kg)  
Mountings: Self-supporting on rubber feet  
Portability: Carried by handle

### Power Requirements

Protection against electrical shock: Internally powered or Class II when powered from specified external power supply.  
AC input: 230-240 VAC/50 Hz, 92mA  
DC output voltage; 12VDC supplied from a source conforming to IEC 601-1.  
The AC mains power adapter contains a nonresettable and nonreplaceable fuse.  
For external DC: Four fuses are auto-resettable and mounted within the Monitor. The fuses protect the low voltage DC input, the battery, the remote alarm output, and the +5 V output on the host port connector.  
When used with the recommended accessories, the Monitor is protected against the effects of defibrillator discharge.  
If monitoring is disrupted by the defibrillation, the Monitor will recover.

### Battery

Specifications: 6 volt, 3.3 amp-hours protected by internal auto-resetting fuse and thermal protection.  
Minimum operation time: 5 hrs (5 min cycle with adult cuff at 25°C, SpO<sub>2</sub> active at 60 bpm, Temp in monitor mode) from full charge.  
Time for full recharge: Approx. 5 hrs from full discharge when the Monitor is switched off and 8 hrs when the Monitor is switched on.

### Applications features

#### DINAMAP NIBP

Blood Pressure Accuracy Meets or exceeds ANSI/AAMI standard SP-10 (mean error ≤ 5 mmHg, standard deviation ≤ 8 mmHg)  
Patient category: Adult or neonates mode  
Cuff Pressure Range: 10 to 290 mmHg (adult/ped) (Normal operating range); 10 to 140 mmHg (neonate)  
Target cuff inflation range: between 100-250mm Hg (adults); 100-140 mm Hg (neonate) per 5mm Hg step  
Maximum Determination Time: 120 s (adult/ped); 85 s (neonate)  
Overpressure Cutoff: 330 mmHg (adult/ped); 165 mmHg (neonate)  
Pulse Rate Range: 30 to 200 beats/min (adult/ped); 30 to 220 beats/min (neonate)  
Pulse Rate Accuracy: ± 3.5%  
Mode settings: Manual, auto or stat mode  
Auto mode: Stat, 1, 2, 3, 4, 5, 10, 15, 20, 30, 60, 90, 120 min

### IVAC® Turbo•Temp™ Temperature

Scale: °Fahrenheit (F); °Celsius (C)  
Range: Predictive mode Max: 41.1° C; 106.0° F; Min: 35.6° C; 96.0° F  
Monitor mode Max: 41.1° C; 106.0° F; Min: 26.7° C; 80.0° F  
Accuracy: Monitor mode accuracy ± 0.1° C; ± 0.2° F  
Determination time: approx. 10 seconds, typical

## Masimo SET® SpO<sub>2</sub>

Measurement Range: SpO<sub>2</sub> 1 to 100%  
Pulse Rate: 25 to 240 beats/min  
Resolution: Saturation 1%  
Pulse Rate 1 bpm

### Accuracy and Motion Tolerance

Saturation: Without Motion: - Adult/Ped 70 to 100% ±2 digits; - Neonate 70 to 100% ±3 digits  
Saturation With Motion: - Adult/Ped/Neo 70 to 100% ±3 digits  
Low Perfusion 70 to 100% ±2 digits  
Pulse Rate Range Without Motion: 25 to 240 beats/min ±3 digits  
Pulse Rate Range With Motion: normal physiologic range 25 to 240 beats/min ±5 digits

### Low Perfusion Performance

Sensitivity Mode: Sensitivity Mode (Sen) setting allows you to adjust the thresholds for calculating SpO<sub>2</sub> values under low perfusion conditions  
Averaging Time: Time allows you to choose the number of seconds over which SpO<sub>2</sub> data is averaged  
FastSAT: allows you to choose the speed of calculation

### Sensor Light Source

Wavelength Infrared: 905 nm (nominal); Red: 660 nm (nominal)  
Power Dissipation Infrared: 22.5 mW (max); Red: 27.5 mW (max)

### Interfering Substances

Carboxyhemoglobin may erroneously increase readings. Dyes, or any substance containing dyes, that change usual arterial pigmentation may cause erroneous readings

## Nellcor OxiMax™ SpO<sub>2</sub>

Measurement Range: SpO<sub>2</sub> 1 to 100%  
Pulse Rate 20 to 250 beats/min  
SpO<sub>2</sub> signs: SpO<sub>2</sub> % value and SpO<sub>2</sub> pulse indicator (red LED bar flashes)

### Accuracy and Motion Tolerance

Saturation Without Motion: - Adults 70 to 100% ±2 digits; Neonate 70 to 100% ±3 digits  
Saturation With Motion: - Adults/Neo 70 to 100% ±3 digits  
Low Perfusion 70 to 100% ±2 digits  
Pulse Rate Range Without Motion: 20 to 250 beats/min ±3 digits  
Pulse Rate Range With Motion: normal physiologic range 55 to 125 beats/min ±5 digits  
Low Perfusion 20 to 250 beats/min ±3 digits

### Sensor Light Source

Wavelength Infrared: 890 nm (nominal); Red: 660 nm (nominal)  
Power Dissipation Infrared: 22.5 mW (max); Red: 30 mW (max)

### Low Perfusion Performance

Response Mode: allows the user to specify the averaging technique to optimise measurements in the presence of various patient movement  
SatSeconds™: limit-controls the time that the %SpO<sub>2</sub> level may fall outside the alarm before an audible alarm sounds

### Alarms

Audible Indicator Pitch changes continuously with saturation: volume from 0 to 9  
Sensor Connect/Disconnect from patient detection within 15 s  
Sensor Connect/Disconnect from monitor detection within 5 s  
Loss of Pulse Monitor will detect loss of pulse from patient and enter no signal state within 10 s

### History

Storage: 25 entries  
When full, the oldest entry is removed so the most recent entry can be stored. Entries are automatically removed when they become older than 24 hours  
Entries can be Systolic, Diastolic, MAP, Pulse Rate, SpO<sub>2</sub>, Temperature values

### Alarms

An alarm can generate an audible indication, visual indication, alarm message code, and electronic record in the history. The audible indicator is based on two sounds depending on the priority of the alarm (medium or high)  
ProCare provides 3 categories of alarms:  
Patient-related: Limit and Parameter status alarms  
System-related: Printer, battery and memory alarms  
System failures  
Alarm suspension: 2 min  
Volume adjustment from 1 to 10  
Alarm signs: Single silence button and silence icon

### Printer (optional)

Two types of printouts: Printout of the currently displayed values or Printout of all entries stored in the history mode

<b>Connectivity</b>	
<b>CHANT Server</b>	Provides HL7 output for electronic Patient Medical Records Uses ILCs (Isolated Level Convertors) when required along with the CHANT software to communicate HIS System
<b>ILC-001926: Hardwired connection</b>	Interfaces the ProCare 100-400 series monitor to ANY hardwired connection Requires Cables: ProCare 100-400: cable p/n 683235
<b>IPC-001931: Connection to CIC system</b>	Provides Central Alarm notification and data management Wireless data transmission. Transfers vital signs results from the Monitor to the CIC Requirements for use: Plug DINAMAP into ApexPro using the DINALINK cable; Apex version 2; CIC version 3
<b>Nurse Call System</b>	When the DINAMAP monitor alarms, the Nurse Call System is triggered Uses a Nurse Call Cable to attach to the System. P/N 487208CR
<b>Accessories</b>	
<b>Mountings</b>	DINAMAP Rolling Stand kit 2014373-001 that includes power supply holder for power brick 2017248-001 and utility basket for wall mount WM-0001-02C Wall Mounting CR-008-001 require a mounting plate 2009762-001
<b>DINAMAP NIBP</b>	Air Hose 12 ft Adult/Pediatric, Screw Connector 107365 ; Air Hose 24 ft Adult/Pediatric, Screw Connector 107366 Air Hose 12 ft Neonatal, Quick Disconnect 107368 CLASSIC-CUF® Assortment Pack 2692; 1 each: Infant, Child, Small Adult, Adult, Large Adult, Thigh Cuff CLASSIC-CUF® Assortment Pack, Neonate 2693; 2 Neo #1, 3 Neo #2, 5 Neo #3, 5 Neo #4, 5 Neo #5 SOFT-CUF® Assortment Packs: 002695; 1 Infant, 1 Child, 2 Small Adult, 2 Adult, 2 Large Adult, 1 Thigh, 1 Adult Long Cuff SOFT-CUF® Assortment, Neonate 2694; 2 Neo #1, 3 Neo #2, 5 Neo #3, 5 Neo #4, 5 Neo #5 DURA-CUF® Assortment Packs: 002699; 1 each: Infant, Child, Small Adult, Adult, Large Adult, Thigh Cuff DURA-CUF® Assortment Pack, Adult 002698; 1 each: Infant, Child, Small Adult, Adult, Large Adult, Thigh Cuff DURA-CUF® Assortment Pack, Child 002697; 2 Infant, 3 Child, and 1 Small Adult Cuff Additional Blood Pressure Cuff Codes are available through: <a href="http://www.gemedicalsystems.europe.com">www.gemedicalsystems.europe.com</a>
<b>Masimo SET® SpO<sub>2</sub></b>	Extension Cable (PC08) 2009743-001 Adult Reusable Sensor, 1/Bx (NR125) 2009745-001 Adult fingerclip sensor, reusable (DCSC) 2002800-001
<b>Nellcor OxiMax™ SpO<sub>2</sub></b>	Pulse Oximeter Extension Cable (DOC-10) 2008773-001 DuraSensor Adult Oxygen Sensor (DS100A) 70124021
<b>IVAC® Turbo•Temp™ Temperature</b>	IVAC® Turbo•Temp™ Oral Temperature Probe, Long Cord 2008774-001 IVAC® Turbo•Temp™ Rectal Temperature Probe, Long Cord 2008775-001 IVAC® Temperature Probe Covers 088015 (box of 5000 units)
<b>Printer</b>	Recording Paper (box of 10) 089100
<b>Power supply</b>	Power supply brick 2013057-001 Battery 633178CR

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